General features for MPPV Series battery (OPzV)

* Tubular positive plate;separator with the combined application of porous rubber and porous PVC,separator is with a high porosity & good corrosion resistance.
  Gelled electrolyte technology.
* Computer designed lead, calcium tin alloy grid for high power density.
* Long service life, maintenance-free during the whole service life.
* Alloy (no antimony) and internal oxygen recombination ensure low gassing .
* High cyclic ability,no internal short circuits in the GEL structure.
* Easy to move and handle ,easy using cable connectors or copper connectors in the battery connection..

maxton
Maxton Power Tech Co.,Ltd
www.maxtonpower.com
info@maxtonpower.com

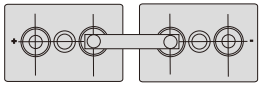
MPPV2-600 (2V600Ah)

Specifications

Nominal Voltage		2 V
Rated capacity (10 hour rate)		600 Ah
Dimensions (±3mm)	Total Height (Include terminal)	681mm (26.8inches)
	Height	646mm (25.4inches)
	Length	145mm (5.71inches)
	Width	206mm (8.11inches)
Approx weight (±5%)		41.5Kg (91.3lbs)

Battery picture and construction

Connection method for reference:

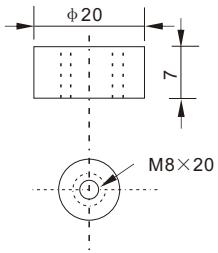


Battery Construction

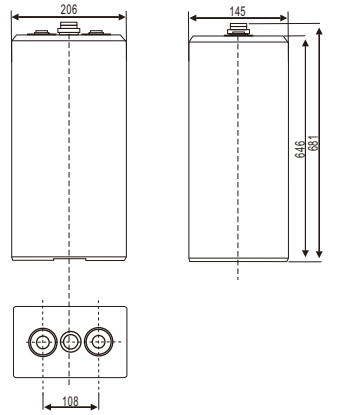
Component	Positive plate	Negative plate	Container	Cover
Raw material	Lead dioxide	Lead	ABS	ABS
Component	Electrolyte	Separator	Safety valve	Terminal
Raw material	Gelled acid	PVC	Rubber	Copper

Outer dimension and terminal

Terminal:TP



Outer dimensions(±3mm)Unit:mm



Characteristics

Capacity 25℃(77℉)	10 hour rate(60A,1.8V) 3 hour rate(156A,1.75V) 1 hour rate(340A,1.60V)	600Ah 468Ah 340Ah
Internal Resistance	Full charged battery at 25℃(77℉)	Approx 0.6 mΩ
Capacity affected by Temperature (10hour rate)	40℃ (104℉) 25℃ (77℉) 0℃ (32℉) -15℃ (5℉)	103% 100% 85% 65%
Remaining capaicty Self-Discharge At 25℃(77℉)	Capacity after 3 month storage Capacity after 6 month storage Capacity after 12 month storage	94% 88% 75%
Terminal type		TP (copper)
Max. Discharge current 25℃/(77℉)		3000A (5Seconds)
Nominal operating temperature		25℃ ±5℃(77□ ±9□)
Operating Temperature Range	Discharge Charge Storage	-15℃～50℃ (5℉～122℉) -10℃～50℃ (14℉～122℉) -20℃～50℃ (-4℉～122℉)
Charge methods (constant Voltage) At 25℃(77℉)	Cycle use	Initial Charging Current less than 150 A Voltage 2.40-2.50V Temperature compensation:-3mV/℃
	Standby use	Voltage 2.25-2.27V Temperature compensation:-3mV/℃

Constant current discharge (25℃ , 77 ℉)

Unit:A

Constant Current(Amp) Discharge Table at 25℃(77℉)										
Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.65V	500	337	206	158	128	109	93.6	73.8	61.2	32.3
1.70V	485	328	204	157	127	108	93.0	73.2	60.6	32.2
1.75V	473	322	201	156	126	107	92.4	72.6	60.6	32.0
1.80V	455	312	196	151	122	104	89.4	70.2	60.0	31.8
1.85V	433	296	186	143	116	99	85.2	66.6	57.0	30.2

(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

Constant power discharge (25℃ , 77 ℉)

Unit:watts

Constant Power(Watt) Discharge Table at 25℃(77℉)										
Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.65V	935	640	397	310	250	215	185	146	121	64.8
1.70V	906	624	394	308	248	213	184	145	121	64.2
1.75V	884	611	388	306	247	212	182	144	120	64.2
1.80V	851	593	378	296	239	205	176	139	119	63.6
1.85V	809	563	359	281	227	195	167	132	113	60.4

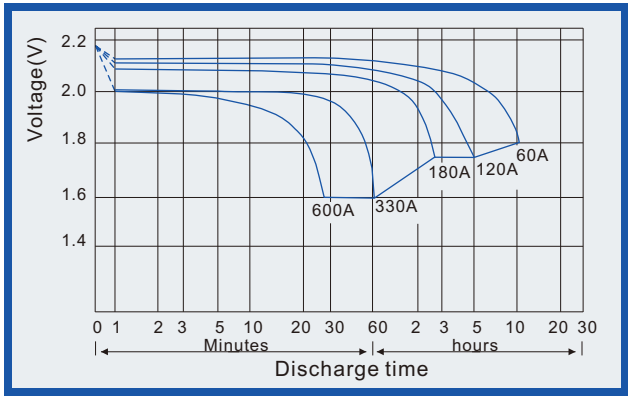
(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

OPzV Battery
(Maintenance-free;Tubular plate & GEL technology)

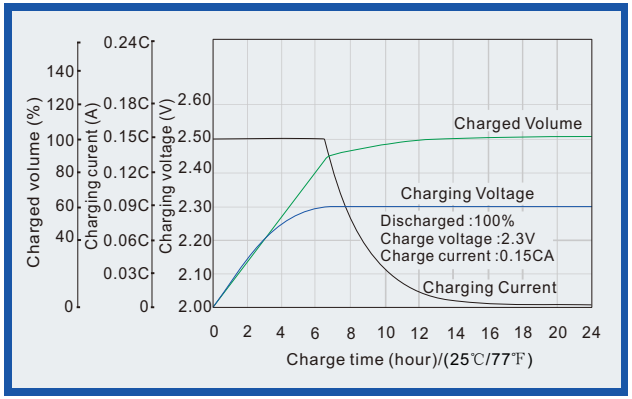
info@maxtonpower.com
www.maxtonpower.com
Maxton Power Tech Co.,Ltd

MPPV2-600 (2V600Ah)

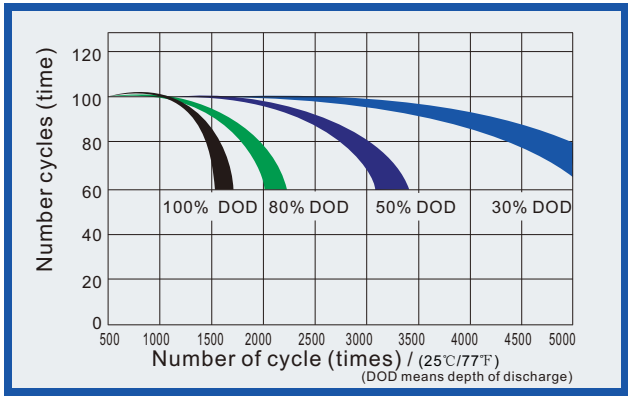
Discharge characteristics (25℃,77℉)



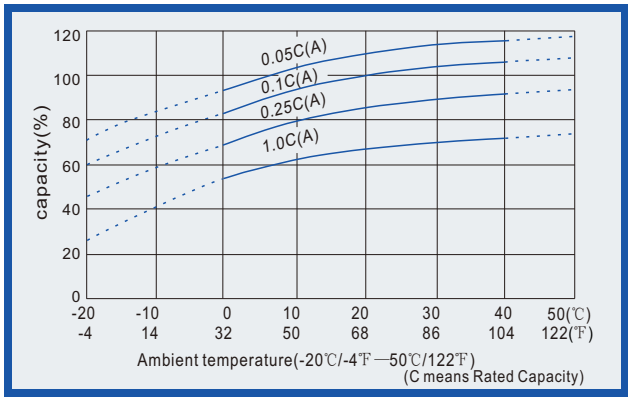
Charge characteristics (25℃,77℉)



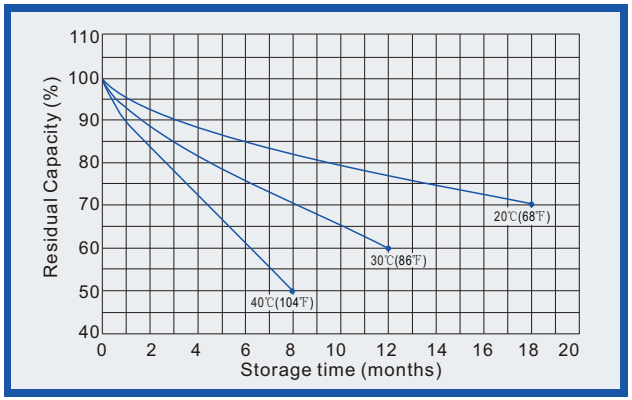
Life characteristics of Cyclic Use (25℃,77℉)



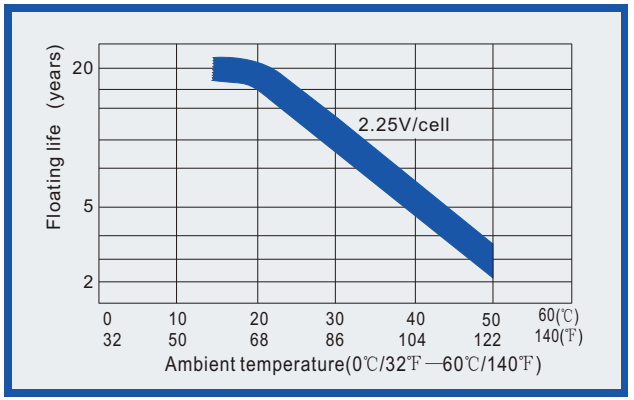
Effect of Temperature on capacity



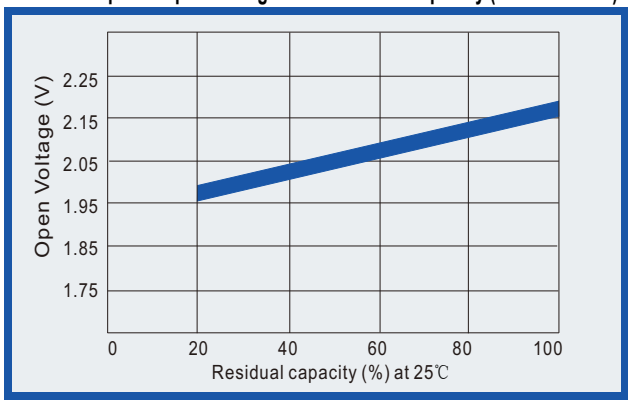
Self-discharge characteristics(with full charging)



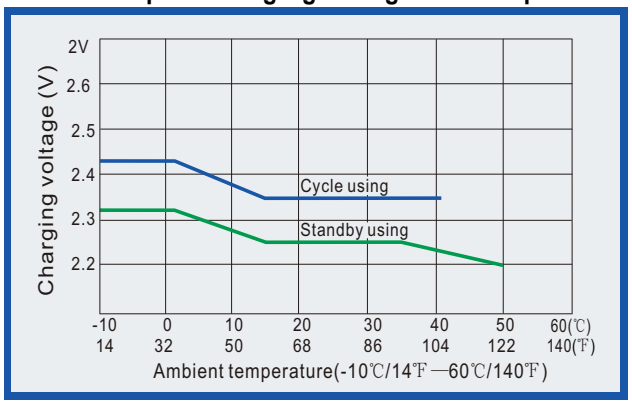
Relationships for floating life and temperature



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Effect of temperature on capacity